

**A METHOD FOR CREATING PATH-SENSITIVE BRANCH
REGISTRY FOR CYCLIC DISTRIBUTED TRANSACTIONS**

ABSTRACT OF THE DISCLOSURE

An exemplary embodiment of the invention is a method for providing a path-sensitive
5 branch registry for cyclic distributed transactions. This method requires that a superior
node's transaction manager (TM) identify itself as the root followed by sending the
syncpoint cue to at least one subordinate node. Before sending the syncpoint cues to the
subordinate the superior links the inbound messages with its specific branch qualifier
(BQUAL) as well as a global transaction identifier (GTRID). The TM of each subordinate
10 node receives syncpoint cues and is responsible for knowing who its superior is. In
addition, the TM is responsible for recognizing the flow of branch instructions and
guarantee that it uses a network-wide unique value for the branch values it generates for a
given global transaction. With the recognition of the flow from the superior node the
subordinate TM updates the node registry as to the inbound and outbound flow of branch
15 messages by its superior and its subordinates.